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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT J. CURRAN, RADHA R. KANDADAI, IRIT LOY, and
JOHN M. MARBERG

Appeal 2009-007810
Application 10/730,508¹
Technology Center 2400

Before JAY P. LUCAS, ST. JOHN COURTENAY, III, and DEBRA K.
STEPHENS, *Administrative Patent Judges*.

LUCAS, *Administrative Patent Judge*.

DECISION ON APPEAL²

¹ Application filed December 8, 2003. The real party in interest is IBM Corp.

² The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

STATEMENT OF THE CASE

Appellants appeal from a final rejection of claims 1 to 20 under authority of 35 U.S.C. § 134(a). The Board of Patent Appeals and Interferences (BPAI) has jurisdiction under 35 U.S.C. § 6(b).

We affirm the rejections.

Appellants' invention relates to a method for managing data movement with greater efficiency. (*See* Spec. ¶¶ [0001] and [0042].) In the words of Appellants:

Data residing in [a] cluster is organized in files arranged according to a file system. Since the computing environment is set up in a parallel arrangement to allow data processing to be conducted in parallel, it follows that a parallel file system that can handle one or more operating platforms has to be employed in such an environment. A parallel file system can be described as a hierarchical collection of files and file directories that are stored on disk or other medium and have an identified root and a predefined interface.

(Spec. ¶ [0027]).

The following illustrates the claims on appeal:

Claim 1:

1. A method of managing data movement, comprising:

establishing a processing environment in a cluster of nodes having common access to data residing in one or more data storage units;

initiating a data management application
(DM) in said environment;

assigning a node of said cluster as a
coordinating node for managing data movement;

receiving an event by the coordinating node
requesting movement of data;

posting a worker thread to one or more of
the nodes to perform data movement in response to
the event.

The prior art relied upon by the Examiner in rejecting the claims on
appeal is:

Barnhouse ³	US 6,518,461	Jul. 09, 2002
Moore	US 2004/0249904 A1	Dec. 09, 2004 (filed Apr. 16, 2003)
Dugan	US 2006/0165223 A1	Jul. 27, 2006
(continuation of various applications dating to Dec. 19, 2001)		

REJECTION

The Examiner rejects the claims as follows:

R1: Claims 1 to 4 and 9 to 20 stand rejected under 35 U.S.C. § 102(e) for
being anticipated by Moore.

R2: Claims 5 to 8 stand rejected under 35 U.S.C. § 103(a) for being
obvious over Moore in view of Dugan.

³ The Examiner points to column 14, lines 32 to 45, of the Barnhouse
reference, which is incorporated by reference by Dugan (Ans. 25, middle to
bottom).

We have only considered those arguments that Appellants actually raised in the Briefs. Arguments Appellants could have made but chose not to make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

ISSUE

The issue is whether Appellants have shown that the Examiner erred in rejecting the claims under 35 U.S.C. §§ 102(e) and 103(a). The issue specifically turns on whether Moore and Dugan teach or render obvious Appellants' claimed "coordinating node," the claimed "event" and the method step of "posting a worker thread to one or more of the nodes to perform data movement in response to the event" (claim 1).

FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence.

Disclosure

1. Appellants have invented a method and system for managing data movement in the context of a high-speed storage area network (SAN) (claim 1; Spec. ¶¶ [0003]; [0008]; and [0009]). Appellants' claimed method includes a process environment with a cluster of nodes having common access to data and initiation of a data management application (claim 1). The method further comprises assigning one of the cluster nodes as a coordinating node to manage data movement; receiving an event by the

coordinating node; and posting a worker thread to one or more of the nodes to move data (*id.*).

Moore

2. The Moore reference teaches a method of managing data movement in a storage area network (SAN) environment (§§ [0005] and [0008]). The U.S. patent application publication teaches a cluster of nodes connected by high-speed fiber channel switches. (*See* Abstract; Fig. 2.) Moore teaches using an industry standard storage management protocol called data migration application programming interface (DMAPI), typically used in the context of storage area networks (§ [0008]). Moore further teaches choosing a leader node for data retrieval and recovery (*see* § [0091]); receiving a request to manage data (*see* § [0076]); and dispatching a worker thread to one or more nodes for purposes of moving data. (*See* § [0117].)

PRINCIPLE OF LAW

Appellants have the burden on appeal to the Board to demonstrate Examiner error. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006).

ANALYSIS

*Argument with respect to the
Inventors' Affidavit submitted under 37 C.F.R. § 1.131*

37 C.F.R. § 1.131 (2008) provides in pertinent part:

(b) The showing of facts shall be such, in character and weight, as to establish *reduction to practice* prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application. *Original exhibits of drawings or records, or photocopies thereof, must accompany and form part of the affidavit or declaration or their absence must be satisfactorily explained.* (emphasis added).

Appellants attempt to swear behind the filing date of the Moore reference, claiming an actual reduction to practice date that would render Moore invalid as prior art. (See “Affidavit Submitted under 37 CFR 1.131” (hereafter “Affidavit”) filed Nov. 15, 2007.)

We have thoroughly considered the inventors’ signed affidavit. However, we find a clear lack of evidence supporting the assertion that the actual reduction to practice date of the claimed invention antedates Moore’s filing date. Rather, we observe that Appellants have merely repeated the claim language (see “Affidavit,” page 1 *et seq.*), providing no proof substantiating their claim. Nor have Appellants explained the absence of evidence in the form of original exhibits of drawings, records, photocopies, and the like. Thus, we find Appellants’ assertion of actual reduction to practice amounts to a mere pleading that is unsupported by proof or a showing of facts of sufficient character and weight to establish prior invention. See *In re Borokowski*, 505 F.2d 713, 718 (CCPA 1974).

Accordingly, we find no reversible error in the Examiner’s finding that the affidavit submitted under 37 C.F.R. § 1.131 is defective and thus

fails to establish actual reduction to practice before the effective filing date of the Moore reference.

*Arguments with respect to the rejection
of claims 1 to 4 and 9 to 20
under 35 U.S.C. § 102(e) [R1]*

The Examiner has rejected the noted claims for being anticipated by Moore, pages 4 to 8 of the Examiner's Answer.

We first address what Appellants cite as their strongest argument against anticipation, *i.e.*, Appellants' claimed method step for "posting" is novel because the event processing for data migration can be done in parallel fashion, unlike the prior art reference Moore (App. Br. 9, middle).

We disagree with Appellants' argument for the following reasons. We find that Appellants have invented a method and system for managing data movement in the context of a high-speed storage area network (SAN) (FF#1). Appellants' claimed method includes a process environment with a cluster of nodes having common access to data and initiation of a data management application (*id.*). The method further comprises assigning one of the cluster nodes as a coordinating node to manage data movement; receiving an event by the coordinating node; and posting a worker thread to one or more of the nodes to move data (*id.*).

The Moore reference teaches a method of managing data movement in a storage area network (SAN) environment (FF#2). The U.S. patent application publication teaches a cluster of nodes connected by high-speed fiber channel switches (*id.*) Moore teaches using an industry standard storage management protocol called data migration application

programming interface (DMAPI), typically used in the context of storage area networks. (*id.*). Moore further teaches choosing a leader node for data retrieval and recovery; receiving a request to manage data; and dispatching a worker thread to one or more nodes for purposes of moving data. (*id.*).

With respect to Appellants' argument for the claimed "posting" step, we find that the argument is not commensurate with the scope of the claim language. That is, nowhere does the language of claim 1 require data migration be accomplished "in parallel fashion." Instead, the claim merely recites "posting a worker thread to one or more of the nodes to perform data movement." (Claim 1). The "or" language of claim 1 ensures that just one worker thread need only be dispatched (*i.e.*, the claimed "posting") to a single node to perform data movement in order for the claim limitation to be met by the prior art. Indeed, Moore's disclosure meets the limitation where Moore describes dispatching threads to nodes for purposes of recovery and relocation of data (*i.e.*, the claimed "data movement"). (See ¶¶ [0117] and [0118].)

Appellants then argue that since the Moore reference teaches two types of nodes and the claimed invention requires no such dichotomy, claim 1 is allowable (App. Br. 9, top).

We disagree with Appellants. The mere fact that the Moore reference teaches various types of nodes does not obviate the fact that "a cluster of nodes" (claim 1) is taught in the prior art. Accordingly, we find Appellants have not demonstrated error in this regard.

Next, it is Appellants' contention that Moore fails to disclose a single event being processed in a "parallel fashion." (App. Br. 9, top). While we acknowledge that Appellants' Specification discloses advantages of parallel

processing (*see* ¶ [0027]), we find no such recitation of processing in a “parallel fashion” in the claim language. Since Appellants chose not to recite the argued “parallel fashion” language, we find Appellants have not demonstrated error in the rejection.

Appellants contend that the term “coordinating node” is taken out of context in comparison with Appellants’ disclosure since Moore refers to a “leader node” under a section of the reference entitled “Relocation and Recovery.”

We do not agree. The Moore reference discloses that “request(s) will be sent to the node in the leader state 206. If there is no existing leader, conventional techniques are used to elect a leader and that node transitions to the leader state 206.” (¶ [0091]). Moore’s disclosure of choosing a “leader state,” which is categorized under “Recovery and Relocation,” is all in the context of a storage area network and the migration and relocation of data. (*See* Abstract; ¶¶ [0008] and [0089].) We interpret Appellants’ claimed “coordinating node” as reading on the reference’s “leader state 206,” as both oversee data movement operations. The mere fact that Moore discloses that a node has failed and another node is chosen as a “leader” does not preclude the fact that a “coordinating node,” as claimed is taught by the reference. We thus find Appellants have not shown error in this regard.

Finally, with respect to the rejection R1, Appellants argue that the claimed “receiving” step (claim 1) is not similar to Moore’s Data Management Application Protocol Interface (DMAPI) events.

We disagree. We find that a comparison of the examples of Appellants’ claimed “events” found in the disclosure (*see* ¶ [0036]) are no different from the “DMAPI events” disclosed in Moore at paragraph [0076].

According to the disclosure, “events” include “a task processing request. “In an environment having a DMAPI, the operating system informs the particular data management application . . . to read a certain area of a file.” In comparison, Moore discloses that events include “read, write, and truncate.” Thus, “events” as claimed are synonymous with Moore’s “DMAPI events.” Accordingly, we find Appellants have not demonstrated error in the rejection R1.

*Arguments with respect to the rejection
of claims 5 to 8
under 35 U.S.C. § 103(a) [R2]*

The Examiner has rejected the noted claims for being rendered obvious by Moore and Dugan, pages 8 to 12 of the Examiner’s Answer.

Appellants argue that the claimed “session” was taken out of context in the Examiner’s rejection.

We carefully reviewed Briefs, the Answer, the Moore and Dugan references, as well as the Barnhouse reference incorporated by reference in Dugan and cited by the Examiner as evidentiary proof of Appellants’ claimed “session.”

We agree with and adopt the Examiner’s findings with regard to the rejection of claims 5 to 8 (Ans. 24 to 25). We refer Appellants to the “Response to Arguments” section of the Answer for further details (*id.*). Accordingly, we affirm the rejection R2.

CONCLUSION OF LAW

Based on the findings of facts and analysis above, we conclude that Appellants have not shown that the Examiner erred in rejecting claims 1 to 20.

DECISION

We affirm the Examiner's rejections R1 and R2 of claims 1 to 20.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

erc

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